ABSTRACT OF THE INVENTION

The present invention provides a method of inhibiting a member of a family of Protein Tyrosine Phosphatases (PTPases, PTPs) such as PTP1B, TC-PTP, CD45, SHP-1, SHP-2, PTPα, PTPε, PTPμ, PTPδ, PTPσ, PTPζ, PTPβ, PTPD1, PTPD2, PTPH1, PTP-MEG1, PTP-LAR, and HePTP by exposing said Ptpase member by administration to a host or otherwise to at least one compound with certain structural, physical and spatial characteristics that allow for the interaction of said compound with specific residues of the active site of PTP1B and/or TC-PTP.

These compounds are indicated in the management or treatment of a broad range of diseases such as autoimmune diseases, acute and chronic inflammation, osteoporosis, various forms of cancer and malignant diseases, and type I diabetes and type II diabetes, as well as in the isolation of PTPases and in elucidation or further elucidation of their biological function.